

IV.—Studies of Tetriginæ (Acrydiinæ) from
the Sarawak Museum, Borneo. By Dr.
J. L. HANCOCK.

THE specimens of Bornean Tettigids treated in the present paper were sent to me for determination by Mr. J. C. Moulton, Curator of the Sarawak Museum. The total number of specimens submitted is one hundred and seventy-one, representing thirty-four species, a number of which are new and very interesting forms.

Genus TRIPETALOCERA, Westwood.

Westwood, Zool. Journ. v. p. 444, 1838; Bol. Ann. Soc. Ent. Belg. xxxi. p. 310, 1887; Hanc. Gen. Ins. Orthopt., Acrid. Tetr. p. 4, 1906.

T. ferruginea, Westw.

Westw. p. 444, pl. 22, fig. 3, 1834; *Acridium (Tetrix) ferrugineum* of De Hann p. 168, 1842; &c.

Locality,* Matang Rd., June, 1910; Pampal, May, 1899. Two examples from Sarawak Museum.

Genus DISCOTETTIX, Costa.

Costa, Ann. Mus. Zool. Nap. ii. p. 59, 1864; Bol. Ann. Soc. Ent. Belg. xxxi. p. 306, 1887; Hanc. Gen. Ins. Orthopt., Acrid. Tetr. p. 6, 1906; *Mnesarchus* of Stål 1877.

D. belzebuth, Serv.

Ins. Orthopt. p. 759, 1839; &c.

Locality, Limbang, April, 1910; Matang Rd., Nov. 1, 1911; Lundu, Oct. 1909; numerous larvæ in different stages from Kuching, Sadong, and Matang.

D. shelfordi, Hanc.

Hancock, Trans. Ent. Soc. Lond. p. 214, 1907.

Locality, Mt. Penrissen, May, 1909; Kuching, June, Aug. and Nov. 1899; Malinau, near Mt. Molu, Nov. 21, 1910.

Five examples from the Sarawak Museum.

* All localities are in Sarawak, North-west Borneo.

Genus PHÆSTUS, Bolivar.

Bolivar, Ann. Soc. Ent. Belg. xxxi. p. 309, 1887; Hanc. Gen. Ins. Orthopt., Acrid. Tetr. p. 7, 1906.

P. insularis, Hanc.

Hancock, Trans. Ent. Lond. p. 214, 1907.

Locality, Kuching (May, July, August, and January).

Twelve examples from Sarawak Museum.

PARAPHYLLUM, gen. nov.

Resembling *Oxyphyllum*, Hancock. Vertex viewed from above little wider than one of the eyes, depressed, viewed in profile not advanced beyond the eyes; frontal costa with the carinæ not at all scutelliform but elongate-sulcate, gradually widened below, upward divided between the paired ocelli, in profile protuberant between the antennæ; antennæ very long filiform, inserted distinctly below the eyes, the distance between their points of insertion nearly equal to the space intervening to the eyes. Pronotum strongly and thinly compressed, foliaceous, margin viewed from above sinuous, crassate, but entire, summit in profile arcuate, roundly produced forward beyond the head, backward sinuate and acute produced beyond the hind femoral apices; lateral lobes posteriorly bisinuate; body bearing elytra and wings. Anterior and middle femora elongate, margins entire; posterior femoral margins entire; first articles of posterior tarsi little longer than the third. The type is *P. antennata* described herewith.

P. antennata, sp. nov.

Body shining granulate, coloured ochreous, with dark radiating veins on sides of pronotum, variously marked with black, namely, with bands on the anterior and middle legs, mottled on hind femora below, black on the knees, wings, and under parts as well as the hind tibiæ with the exception of light band near the knees. Eyes rather small and subglobose. Vertex little wider than one of the eyes, middle carinate, depressed, frontal carinulæ transversely concave, in profile not produced beyond the eyes; antennæ very long, longer than the extended front legs. Pronotal crest highly elevated, strongly compressed, and thinly translucent, laterally traversed by a network of radiating veins, anteriorly roundly produced beyond the head, the projecting apex obtuse, the inferior border forward roundly excavate for the reception of the eyes; in profile

the summit of crest gently sinuous, and backward sloping to the acute angulate produced apex, the margin here being distinctly sinuous or trisinuate toward the apex; viewed from above the crassate-sinuate margin becomes thin toward the apex, the acute posterior process being produced beyond the hind femoral apices; lateral lobes bisinuate, the posterior angles subreflexed and truncate; elytra rather large, elongate; wings fully explicate, strongly extended beyond the pronotal apex; anterior and middle femora elongate, margins entire; hind femoral margins above arcuate, granulate, below substraight, and sparingly hirsute, hind tibiæ rather stout, armed with spines; the first articles of posterior tarsi longer than the third, the second and third pulvilli equal in length, the first minute.

Female.—Entire length of body to end of wings 19.5 mm.; pronotum 17 mm.; height of dorsum from humeral angles to the summit of crest 7 mm.; wings passing pronotum 3 mm.; posterior femora 8 mm.; antennæ 9 mm.

One example from Mt. Penrissen, May, 1899. Sarawak Museum.

STEGACEPS, gen. nov.

Face little oblique; body granulate; eyes conoidal in profile. Vertex wide, median carina produced; antennæ very short, inserted below the eyes, the distance between them much greater than the space intervening between them and the eyes; frontal scutellum above divided between the paired ocelli and distinctly widened between the antennæ. Pronotum anteriorly acute-angulate produced, slightly extended beyond the head, posteriorly lengthily extended beyond the hind femoral knees, dorsal disc transversely tectiform, acute compresso-cristate, in profile arcuate; lateral lobes posteriorly bisinuate; body bearing elytra and wings; anterior and middle femora elongate, margins minutely subcrenulate; hind femoral margins above minutely crenulate, below entire, antegenicular spine acute, genicular spine moderately expressed; first articles of posterior tarsi slightly longer than the third. The type is *S. brevicornis*, herewith described.

S. brevicornis, sp. nov.

Rather small in stature; head granulate; colour ferruginous. Vertex much wider than one of the eyes, middle

strongly carinate, in profile slightly ascendant and obtuse produced beyond the eyes; frontal carinulæ present but abbreviated; frontal scutellum narrowed above, but the rami widely divided and little protuberant between the antennæ, in profile the face sinuate opposite the middle of the eyes and at the base; paired ocelli placed below the middle of the eyes. Pronotum granulate-punctate, disc transversely tectiform, and acute compresso-cristate, subfoliaceous, viewed in profile anteriorly acute angulate produced over and little beyond the head, superior margin of disc arcuate and entire, backward sloping and minutely sinuate-dentate, the median carina posteriorly substraight on the produced subulate apical process; posterior angles of the lateral lobes lightly laminate and obliquely truncate. Elytra elongate, acuminate toward the apices; wings fully explicate, extended barely beyond the apex of pronotal process. Anterior and middle femora elongate, margins minutely denticulate; posterior femora stout, superior margins minutely crenulate, below entire, externally granulose, bearing oblique elevated lines; the first two pulvilli of the posterior tarsi minute, the third longer and flat below.

Female.—Length of pronotum 13.5 mm.; posterior femora 4 mm.

One example from Kabong, June, 1900. Sarawak Museum.

Genus EPITETTIX, Hancock.

Hancock, Trans. Ent. Soc. Lond. p. 216, 1907.

E. punctatus, Hancock.

Trans. Ent. Soc. Lond. p. 216, pl. 21, fig. 1, 1907.

Male and female from Mt. Penrissen, May, 1899; Santubong, Feb. 1900. Sarawak Museum.

Genus POTUA, Bolivar.

Bolivar, Ann. Soc. Ent. Belg. xxxi. p. 208, 1887; Hanc. Gen. Ins. Orthopt. Tetr. p. 19, 1906.

P. coronata, Bol.

Ann. Soc. Ent. Belg. xxxi. p. 208, 1887.

Four examples from Mt. Penrissen, 3200 ft., Nov. 21, 1909; Lawas, Sept. 1909; R. Limbang, April 4 and 5, 1910. Sarawak Museum.

Genus AMPHIBOTETTIX, Hancock.

Hancock, Ent. News, xviii. p. 86, 1906; Gen. Ins. Orthopt., Acrid. Tetr. p. 22, 1906.

A. longipes, Hancock.

Ent. News, xviii. p. 87, 1906.

Ten examples from Ulu Lawas, Aug. 30, 1909; Limbang, April 4, 1910. Sarawak Museum.

Genus FALCONIUS, Bolivar.

Bolivar, Ann. Mus. Genova, xxxix. p. 69, 1898; Hanc. Gen. Ins. Orthopt., Acrid. Tetr. p. 25, 1906.

F. planotarsus, Hancock.

Mazarredia planotarsus, Hanc. Trans. Ent. Soc. Lond. p. 231, 1907.

Eight examples from Matang Rd., June 10, 1910; Kuching, June and July, 1910; Trusan, Aug. 1910. Sarawak Museum.

This species is distinguished from *F. clavitarsus*, Bol., by the angulate character of the lateral lobes, which are devoid of spines. In *clavitarsus* the lateral lobes are armed with hooked spines. It is the female only that presents the clavate tarsi, and this fact misled me in describing *planotarsus* as a *Mazarredia*, the type being a male.

Genus ACANTHALOBUS, Hancock.

Hancock, Spol. Zeyl. ii. p. 131, 1904; Gen. Ins. Orthopt. Acrid. Tetr. p. 28, 1906.

A. longinotus, Hanc.

Trans. Ent. Soc. Lond. p. 221, 1907.

Four examples from Sadong, April and Aug. 1903; Kuching, Sept. 2, 1897. Sarawak Museum.

A. robustus, Hanc.

Trans. Ent. Soc. Lond. p. 222, 1907.

One example from Kuching, July, 1899. Sarawak Museum. This female specimen is somewhat larger in stature than the type form, but evidently belongs to this species.

A. rugosus, Bol.

Bolivar, Ann. Soc. Ent. Belg. xxxi. p. 228, 1887.

Four examples of this short-winged species from Matang Rd., Oct. 13-14, 1909; Kuching, May and July, 1900. Sarawak Museum.

A. bispinosus, Dalm.

Vet. Acad. Handl. p. 77, 1818; &c.

Two examples from Kuching, 1897. Sarawak Museum. These specimens do not materially differ from specimens in my collection from China.

Genus *CRIOTETTIX*, Bolivar.

Bolivar, Ann. Soc. Ent. Belg. xxxi. p. 222, 1887; Hanc. Spol. Zeyl. ii. p. 128, 1904; Gen. Ins. Orthopt., Acrid. Tetr. p. 27, 1906.

C. lineatus, Hancock.

Paratettix lineatus, Hanc. Trans. Ent. Soc. Lond. p. 237, 1907.

Five examples from Kuching, April, May and Dec. Sarawak Museum.

In both *lineatus*, Hanc., and *angulobus* the antennæ are inserted between the eyes, and the lateral lobes of the pronotum are only very slightly dilated and obliquely truncate. In the last mentioned species the angulate lobes project laterally when viewed from above.

C. angulobus, Hancock.

Paratettix angulobus, Hanc. Trans. Ent. Soc. Lond. p. 236, 1907.

Two examples from Kuching. Sarawak Museum.

C. moultoni, sp. nov.

Colour ferruginous; body rather smooth; head slightly exserted. Vertex subequal in width to one of the eyes, somewhat smooth, subtumid backwards, the median carina slightly roundly produced; eyes elevated above the dorsum of pronotum; frontal costa arcuately elevated between the antennæ, divided slightly above the paired ocelli, the rami divergent forward; antennæ long filiform, inserted forward and just below the angles of the eyes. Pronotum deplanate, granulate-punctate, dorsum transversely convex between the shoulders, humeral angles bicarinate, and between the

shoulders bearing abbreviated carina on each side; posterior process lengthily extended beyond the hind femoral apices; lateral lobes little expanded right-angulate, obliquely truncate; elytra oblong, the apices narrowly rounded sub-acuminate; wings fully explicate extending to the pronotal apex. Anterior femora slender, margins above subundulate, below entire; middle femoral margins granulate; apical spine of posterior femora acute; the three pulvilli of the posterior tarsi subequal in length, the third more flattened below.

Female.—Entire length of body 12·5 mm.; pronotum 11·5 mm.; post. femora 5·5 mm.

One example from Mt. Penrissen, May, 1899. Sarawak Museum.

C. inermis, sp. nov.

Colour ochreous, fusco-variegated, above bearing a median pale fascia; body granulate. Vertex scarcely wider than one of the eyes, narrowed forward, middle carinate, frontal carinulæ reflexed at the sides, the ocular lobes distinct; frontal costa arcuate, but little protuberant between the antennæ, in profile barely subsinuate above the paired ocelli; antennæ short, not reaching to the humeral angles. Pronotum granulate; median carina percurrent; prozonal carinæ convergent backward; the lateral carinæ of process extended forward, being percurrent on the disc making the humeral angles bicarinate, between the shoulders bearing two abbreviated elevated lines; posterior process lengthily extended beyond the hind femoral apices; lateral lobes slightly reflexed, the posterior angles obliquely truncate, subobtuse; elytra oval; wings reaching to the end of the pronotal process. Anterior and middle femora slender, margins entire.

Male. — Entire length of body 13 mm.; pronotum 12 mm.; post. femora 5·5 mm.

One example from Kuching, Aug. 1899. Sarawak Museum.

This species resembles *moultoni*, but is readily distinguished by the less exserted head, less elevated eyes, in the obtuse angles of the lateral lobes of pronotum, and the slightly shorter antennæ.

Genus LOXILOBUS, Hancock.

Hancock, Spol. Zeyl. ii. p. 134, 1904; Gen. Ins. Orthopt., Acrid. Tetr. p. 29, 1906,

L. truncatus, Hancock.

Trans. Ent. Soc. Lond. p. 223, 1907.

One example from Buri, Jan. 1901. Sarawak Museum.

Genus *BOLOTETTIX*, Hancock.

Hancock, Trans. Ent. Soc. Lond. p. 223, 1907.

B. validispinus, Hanc.

Hancock, Trans. Ent. Soc. Lond. p. 224, pl. 21, fig. 5, 1907.

Two examples, Sarawak. Sarawak Museum.

B. planus, Hancock.

Hancock, Trans. Ent. Soc. Lond. p. 222, 1907.

Two examples from Matang, June, 1905 and Aug. 1899. Sarawak Museum.

B. parvispinus, sp. nov.

Colour ferruginous, elytra and wings black, the posterior femora below marked with a black fascia. Vertex strongly narrower than one of the globose eyes, not at all produced, middle carinate forward, between the eyes fossulate on either side; frontal costa very slightly protuberant between the antennæ. Pronotum strongly punctate and rugulose; dorsum cylindrical forward, deplanate, subfossulate behind the disc; median carina distinct and obscurely undulate; lateral carinæ of process obscurely extended forward on the shoulders, granulose; posterior process subulate and lengthily extended beyond the hind femoral apices; lateral lobes laminate and armed with acute carinate spines directed obliquely backward; elytra moderately small, acuminate and narrowly rounded at the apices; wings extended to the apex of pronotal process. Anterior and middle femora narrow elongate, margins entire; the three pulvilli of posterior tarsi subequal in length, or third slightly longest.

Female.—Entire length of body 13·8 mm.; pronotum 13 mm.; post. femora 5·5 mm.

One example from Mt. Penrissen, May, 1899. Sarawak Museum.

This species may be distinguished by the rugulose-punctate pronotum, larger elytra, and the oblique, very sharp spines, arming the lateral lobes.

PROSOALTUS, gen. nov.

Head strongly and obliquely produced; eyes prominently elevated and globose. Vertex narrowed to half the breadth of one of the eyes, not advanced as far as the eyes; frontal costa narrowly compressed between the antennæ, scarcely protuberant; paired ocelli placed between the lower third of the eyes; antennæ moderately long, filiform, articles distinctly elongate, inserted below the eyes. Pronotum deplanate, truncate anteriorly, posteriorly acuminate and extended beyond the hind femoral apices; prozonal carinæ subobsolete; lateral carinæ of process extended on the shoulders; lateral lobes slightly sublamine expanded, and obliquely truncate; superior sinus very shallow, arcuately excavate for the reception of the minute elytra; wings fully explicate. Anterior and middle legs elongate, narrow, margins entire; hind femora bearing acute antegenicular and genicular spines; posterior tibial margins compressed, armed with minute spines; first articles of the posterior tarsi equal in length to the third.

Resembling *Systolederus*, Bol., but having crassate stature, the head more produced, eyes more elevated, the superior sinus of lateral lobes obsolete, and the body provided with minute elytra. The type is *P. oculatus* described herewith.

P. oculatus, sp. nov.

Body somewhat crassate, granulate; colour dark ferruginous, variegated with pale ochre markings on the pronotum and legs, hind femora bearing two light flavous bands, underneath parts black. Vertex not at all produced, depressed, and half the width of one of the eyes, middle carinate, longitudinally fossulate on each side between the eyes, frontal carinulæ roundly elevated and convergent forward; eyes globose and strongly elevated above the dorsum, occiput largely exposed and sloping backward; frontal costa very little protuberant between the antennæ, divided below the paired ocelli, narrowly sulcate. Pronotum granulate, median carina conspicuous but disappearing forward near the front border; posterior process extended backward beyond the hind femoral apices and rather stout; posterior angles of the lateral lobes laminate expanded and obliquely truncate; elytra minute, narrow and acute at the bases and narrowly rounded at the apices; wings dark, extended beyond the pronotal apex. Hind femora fuscous, bearing an oblique yellow band near the

middle and pale annulations before the knees; hind tibiæ fuscous, paler above; the first and third pulvilli of the posterior tarsi subequal in length.

Male.—Entire length of body 16·5 mm.; pronotum 15 mm.; post. femora 8 mm.

Two examples; Mt. Matang, 3100 ft., May 1897 and 1910. Sarawak Museum.

A curious deformity appears in one of these specimens, in which the anterior border of the pronotum, instead of being truncate, is roundly depressed backward, as if shoved into the dorsum. Behind the front border there is a transverse wrinkle.

TÉGOTETTIX, gen. nov.

Head scarcely exserted. Vertex wider than one of the eyes, carinula on each side compressed cornuiform, face subvertical or scarcely oblique; frontal costa not divided above the paired ocelli, the rami parallel, protuberant between the antennæ; antennæ filiform, very long, articles strongly elongate, inserted far below the eyes; paired ocelli placed opposite the lower margin of the eyes; eyes globose, subsessile, and moderately small; apical articles of maxillary palpi compressed, slightly expanded. Pronotum deplanate above, between the shoulders cristate: median carina bearing a series of cornua, anterior margin truncate, posterior process lengthily extended beyond the hind femoral apices; humeral angles prominent, dentate, carinæ serrulate; posterior angles of lateral lobes strongly laminate expanded, obliquely truncate and subserrulate; elytra oblong, apices rounded; wings fully explicate and extended beyond the apex of pronotal process. Anterior and middle legs elongate, armed with strong denticles above, below compresso-lobate and serrulate; anterior tibial margins compressed, outer carina lobate; middle tibiæ compressed, strongly expanded lobate; hind femoral margins above bilobate, below serrulate-dentate, the outer face armed with denticles; genicular spine acute; hind tibial margins compressed and minutely serrulate; first and third articles of posterior tarsi equal in length. This remarkable genus resembles *Tetticerus*, Hancock; the type is *T. armatus* herewith described.

T. armatus, sp. nov.

Body rugose; colour greyish; eyes subsessile. Vertex strongly wider than one of the eyes, concave, not advanced

as far as the eyes, median carina obsolete, frontal carinulæ elevated on each side higher than the eyes, acute cornuiform; face sinuate below the frontal costa. Pronotum above depressed, between the shoulders cristate and strongly bicarinate, behind the disc distinctly depressed, fossulate, and bearing two oblique carinæ; median carina bidentate forward, backward on the process compressed quadricornute, the first cornu of the hind series stouter and more elevated, with a broad tuberculate base, the remaining three cornu toward the apex of process gradually diminishing in size; lateral carinæ serrulate; humeral angles prominent and armed with a denticle; posterior angles of lateral lobes angularly expanded, obliquely truncate and subserrulate behind. Anterior femoral margins above bidentate and minutely serrulate, the apices subtridentate, margins below sinuate-serrulate bearing one large lobe and two smaller denticles; anterior tibial margins externally bilobate; middle femoral margins above tridentate, the apices tridentate, the lower margins strongly tri- or quadri-lobate, carinæ of middle tibiæ below expanded, the inner carina above compressed and bilobate; posterior femoral margins above lobate near the middle, and dentate at the distal fourth; the inferior margins irregularly serrulate and dentate; the genicular spine produced; first and second pulvilli of posterior tarsi minute, acute, the third pulvilli larger and obtuse.

Male.—Entire length of body 16·5 mm.; pronotum 15 mm.; post. femora 7 mm.; antennæ 6·8 mm.

One example from Kuching, December 29th, 1898. Sarawak Museum.

GENUS MAZARREDIA, Bolivar.

Bolivar, Ann. Soc. Ent. Belg. xxxi. p. 236, 1887; Hanc. Spol. Zeyl. ii. p. 138, 1904; Gen. Ins. Orthopt., Acrid. Tetr. p. 42, 1906.

M. centrosa, Bol.

Bolivar, Ann. Soc. Ent. Belg. xxxi. p. 242, 1887; Hanc. Trans. Ent. Soc. Lond. p. 230, 1907.

Six examples from Mt. Matang, 3,100 ft., May 21, 1900; Santubong, Feb. 1900; Kuching, May, June, and December.

ROSTELLA, gen. nov.

Vertex strongly produced horizontally, rostrate, the process advanced more than twice the length of the eyes, middle carinate, lateral carinæ compressed, bilobate, and towards the apex narrowed but obtuse, the vertex between the eyes very wide, more than twice the width of one of the eyes; eyes moderately small; frontal costa widely sulcate; paired ocelli placed barely below the middle of the eyes; antennæ very short, inserted between the lower angles of the eyes. Pronotum smooth, anteriorly obtuse angulate, narrow and scarcely dilated between the humeral angles, lengthily prolonged backward, the posterior process produced beyond the hind femoral apices, subdepressed between the shoulders; humeral angles widely curvate; median carina little elevated compressed; prozonal carinæ forward widely separated, parallel; posterior angles of the lateral lobes turned outwards, angularly dilated; elytra moderately small, oblong, apices narrowly rounded; wings fully explicate but not reaching to the apex of pronotal process. Anterior femoral margins strongly compressed; middle femora more slender-elongate than the anterior, margins subundulate; posterior femoral knees bearing three apical denticles; first articles of posterior tarsi subequal in length to the third.

This genus resembles *Mitritettix*, Hancock, but differs in the form of the produced process of head; in the higher position of the paired ocelli, and place of insertion of the antennæ; in the obtuse angulate front border of the pronotum, and in the slender intermediate tibiæ which are not at all compressed or sulcate. The type is *Acridium (Tettix) phyllocerum*, De Hann, equivalent to *Mitraria phyllocerum*, Bolivar.

R. processus, Hancock.

Mitritettix processus, Hancock, Trans. Ent. Soc. Lond. p. 229, pl. 21, fig. 8, 1907.

Numerous examples, Kuching, Matang Rd. Sarawak Museum.

Bolivar applied the name *Mitraria* to a genus of Tettigids comprising two species. The first-mentioned species, *M. producta*, Bol., appears in South America, and forms the type. The second species, *Acridium (Tettix) phyllocerum*, De Hann, is native of Java. Owing to Bolivar's name *Mitraria* being preoccupied, I renamed his genus *Mitritettix* in Genera Insectorum, footnote, p. 51, 1906. In

the new genus *Rostella*, Hanc., two species are represented, namely, *R. phyllocerum*, De Hann, and *R. processus*, Hancock.*

Genus RHOPALOTARSUS, Hancock.

Hancock, Trans. Ent. Soc. Lond. p. 356, 1910.

R. clavipes, Hancock.

Hancock, Trans. Ent. Soc. Lond. p. 358, 1910.

One example from Kuching, Aug. 15, 1899.

In the original description of this species there occurred a typographical error in giving the length of the body of the female as 21·2 mm. instead of 16·2 mm. The type from Sumatra does not differ from the Bornean example.

Genus EUPARATETTIX, Hancock.

Hancock, Spol. Zeylan. ii. p. 145, 1904; Gen. Ins. Orthopt., Acrid. Tetr. p. 55, 1906.

E. similis, Hanc.

Hancock, Trans. Ent. Soc. Lond. p. 238, 1907.

One example, Lundu, June 1904. Sarawak Museum.

This species resembles *E. personatus*, Bol., the frontal costa being roundly produced beyond the eyes; the antennæ rather long and inserted between the lower angles of the eyes; the paired ocelli placed between the middle of the eyes; posterior femora having the tibiæ black, with one or two light annulations; the third pulvilli of posterior tarsi little longer than the first and second, the first and second being spinose.

E. crassipes, Hancock, sp. nov., MS.†

Three examples, Kuching. Sarawak Museum.

I have recently described this new species from Indian examples, the manuscript now being in the course of publication. The three Bornean specimens from the Sarawak Museum do not differ materially from the Indian type material.

* Kirby gives the name *Miriatra* in his Syn. Cat. of Orthopt. iii. p. 29, to replace my *Mitritettix*, but his name can hardly stand in the face of my previously proposed name as indicated above.

† Since described in 'Memoirs Dept. of Agriculture in India,' vol. iv. No. 2, pp. 153-154, 1912.

Genus TETRIX, Latr.

Latr. Hist. Nat. Crust. Ins. iii. p. 284, 1802; *Acrydium* of Geoffr. 1762; *Tettix* of Charp. Germ. Zeitschr. Ent. iii. p. 315, 1841; &c.

T. contractus, Bol.

Paratettix contractus, Bolivar, Ann. Soc. Ent. Belg. 281, 1887.

Many examples from Kuching, Matang Rd., Sadong, Mt. Penrissen. Sarawak Museum.

This species has the vertex subwider than one of the eyes, the median carina little produced; frontal costa distinctly sinuate between the eyes; antennæ very short; the anterior and middle femoral margins undulate; the third pulvilli of the posterior tarsi as long as the first and second united.

T. polypictus, sp. nov.

Similar to *variegatus*, Bolivar, but differing in several respects, and it has longer antennæ than in *contractus*, Bol. Vari-coloured, fuscous, pale variegated, often bimaculate on the dorsum behind the disc, or again presenting a median pale fascia above, common in many members of the genus *Tetrix*. Head little exserted. Vertex equal in width to one of the eyes, slightly narrowed forward, advanced about as far as the eyes, frontal carinulæ subconvex-truncate, in front view concave; median carina very little produced; frontal costa divided above the paired ocelli, narrowly sulcate, extended almost to the vertex, in profile slightly produced beyond the eyes, indistinctly sinuate just below the vertex and convex-arcuate between the antennæ; paired ocelli placed between the middle of the eyes; antennæ long, articles elongate, inserted between the lower angles of the eyes. Pronotum truncate anteriorly, lengthily subulate posteriorly, passing beyond the hind femoral apices; dorsum subtectiform between the shoulders; median carina compressed, percurrent, elevated, and often barely biundulate on the disc; posterior angles of the lateral lobes subacute triangular, not produced outward as viewed from above; elytra subovate, the apices rather narrowly rounded; wings long and extended beyond the pronotal apex. Anterior femora elongate, margins subentire or indistinctly undulate, minutely crenulate; hind femoral margins minutely crenulate; first and second pulvilli of posterior

tarsi acute spinose, the third as long as the first and second united and flat below; the first and third joints of posterior tarsi equal in length.

Male and female.—Entire length of body 13–14 mm.; pronotum 11–11·5 mm.; hind femora 4–6·5 mm.

Three examples from Kuching, Lingga. Sarawak Museum.

Genus COPTOTETTIX, Bolivar.

Bolivar, Ann. Soc. Ent. Belg. xxxi. p. 287, 1887; Hancock, Spol. Zeyl. ii. p. 52, 1904; Gen. Ins. Orthopt., Acrid. Tetr. p. 65, 1906.

C. rotundatus, Hancock.

Hanc. Ent. Soc. Lond. p. 241, 1907.

One example from Sadong, April, 1903. Sarawak Museum.

C. brevipennis, var. nov.

Similar to *C. rotundatus*, and evidently the short-winged form of that species. The pronotal process and wings extended only as far as the apices of the hind femora.

Male.—Entire length of body 7·5 mm.; pronotum 7 mm.; posterior femora 5·5 mm.

One example, Sadong, April, 1903. Sarawak Museum.

Genus SAUSSURELLA, Bolivar.

Bolivar, Ann. Soc. Ent. Belg. xxxi. p. 303, 1887; Hancock, Gen. Ins. Orthopt., Acrid. Tetr. p. 72, 1906.

S. borneensis, Hancock, sp. nov., MS.*

This new species was described in a manuscript treating of Indian Tetriginæ, now in course of publication, as follows:—

Rather large species; colour fuscous, the face and pronotal lobes behind pale, hind femora mottled with light ochreous, palpi pale, tinged with fuscous. Carinæ of frontal costa parallel, rather pronounced, median facial carina above distinct, as well as the frontal carinulæ of vertex next to the eyes. Pronotal cornu straight in profile, its

* Described in 'Memoirs Dept. of Agriculture in India,' vol. iv. No. 2, p. 160, 1912.

direction only slightly oblique, strongly produced beyond the head, margin above straight, viewed from above strongly narrowed forward, acute compressed, the apex rounded, sides indistinctly concave; prozonal carinæ forward on the dorsum indistinctly indicated; median carina of pronotum compressed, nearly horizontal from the thoracic sulci forward to the hind pronotal apex; dorsum longitudinally fossulate behind the disc on each side, posterior process lengthily produced beyond the hind femoral knees; lateral lobes acute angulate, distinctly produced; inferior sinus very widely obtuse-angulate; elytra subovate, apices rounded, impressed with black, and surrounded with pale elevated line, below becoming crassate apically and lighter coloured; wings extended beyond the pronotal apex nearly one millimeter. Subgenital plate below the female ovipositor trilobate, the middle lobe convex.

Female.—Length of pronotum 20 mm.; posterior femora 7·5 mm.; frontal cornu 3 mm.

One example, Lawas, Sept. 1909. Sarawak Museum.